

Remarks

The Office action mailed September 15, 2005, has been reviewed and carefully considered. Claim 1 has been amended to incorporate the subject matter of claim 4, which is now canceled. Claims 19-22, 25 and 29 have also been amended. Entry of these amendments is respectfully requested.

Restriction Requirement

It is respectfully submitted that withdrawn claims 13-18, 31 and 32 should be re-joined in the event that the elected claims are allowed pursuant to MPEP §821.04.

Information Disclosure Statement

A corrected information disclosure statement is submitted concurrently with this reply that provides a concise explanation of the relevance, as it is presently understood, of DE 198 43 493. It is noted that the English language documents correctly listed on the IDS form were not initialed by the examiner. According to MPEP §609.05(b) (p. 600-158, Rev. 3 August 2005), "other items of information listed that do comply with the requirements of 37 C.F.R. 1.97 and 37 C.F.R. 1.98 will be considered by the examiner and will be appropriately initialed." Thus, the correctly listed English language documents should have been considered and initialed. In any event, these documents are again listed in the currently submitted IDS.

35 U.S.C. §102 Rejections

Claims 1, 3, 4 and 6 were rejected under 35 U.S.C. §102(b) over Sarjeant (U.S. Patent No. 3,285,801). This rejection is traversed because Sarjeant does not disclose an adhesive composition that is substantially formaldehyde-free as recited in claim 1.

The adhesive composition of claim 1 is substantially formaldehyde-free. The present specification states at page 11, lines 16-22, as follows:

“In particular, the adhesive compositions may be substantially free of formaldehyde (including any compounds that may degenerate to form formaldehyde). For example, the adhesive compositions do not contain any formaldehyde (and formaldehyde-generating compounds) that is detectable by conventional methods or, alternatively, the amount of formaldehyde (and formaldehyde-generating compounds) is negligible from an environmental and workplace regulatory standpoint.”

It is clear from this passage that the phrase “substantially formaldehyde-free” excludes the presence of a component that generates formaldehyde.

Sarjeant discloses a composition in which free formaldehyde present from the production of a phenolic resin has been “removed” “by adding sufficient ammonia to the phenolic resin solution to tie up the formaldehyde in the form of hexamethylene tetramine” (column 4, lines 69-72). However, the phenolic resin included in the Sarjeant composition is a hybrid phenol/urea/formaldehyde resin regardless of whether any excess free formaldehyde has been “removed” since it is made by reacting phenol with paraformaldehyde (see column 2, lines 51-53) and then with urea. Such hybrid phenol/urea/formaldehyde resins generate and release formaldehyde during curing, and over time from the finished product (see page 1, line 28 – page 2, line 13, of the present application). Furthermore, Sarjeant itself even notes at column 4, lines 72-75 that “[t]his ‘hexa’ has no deleterious effect and in fact is somewhat beneficial since the formaldehyde therein becomes available for reaction during curing of the formulation in the curing ovens.” In other words, the hexamethylene tetramine decomposes to release formaldehyde. The presently claimed adhesive compositions are substantially formaldehyde-free alternatives to the phenol-formaldehyde resins commonly used for manufacturing wood composites (see page 2, lines 14-17, of the present application). Since Sarjeant fails to disclose all the features of the adhesive composition recited in claim 1, the §102(b) rejection of claims 1, 3, 4 and 6 must be withdrawn.

Claims 1, 3, 5 and 6 have been rejected under 35 U.S.C. §102(b) over Lehtinen et al. (U.S. Patent No. 6,030,562). Claims 1, 5 and 6 have been rejected under 35 U.S.C. §102(b) over

Lloyd et al. (U.S. Patent No. 6,368,529). Since claim 1 has been amended to incorporate the subject matter of claim 4, both of these rejections are moot.

35 U.S.C. §103 Rejections

Claims 1-12 and 19-28 have been rejected under 35 U.S.C. §103 over Sarjeant combined with Brode, III et al. (U.S. Patent No. 6,716,421) or Blount (U.S. Patent No. 4,382,136). This rejection is traversed for the reasons set forth below.

As discussed above in connection with the 35 U.S.C. §102 rejection, Sarjeant does not disclose a substantially formaldehyde-free adhesive composition. The disclosures in neither Brode, III et al. nor Blount compensate for this fatal flaw in Sarjeant. Brode, III et al. and Blount are relied upon for allegedly suggesting substituting a decayed lignocellulosic material for the lignin preparation in the Sarjeant composition. Neither one of the secondary references suggest any substitute for the problematic phenol-formaldehyde component of the Sarjeant composition.

Moreover, the exemplified compositions of Sarjeant employ an alkali lignin preparation (see column 5, lines 21-26). Brode, III et al. and Blount do not, in fact, teach that decayed lignocellulosic material is equivalent to an alkali lignin preparation, especially in the context of an **adhesive** composition. Brode, III et al. lists “decayed wood” as a possible cellulose-containing ingredient for an insecticide composition. A lignin preparation similar to the alkali lignin preparations utilized in Sarjeant is not even mentioned in Brode, III et al. as a possible cellulose-containing ingredient. In view of this silence, Brode, III et al. would hardly have suggested that “decayed wood” is equivalent to an alkali lignin preparation. Blount lists “decomposed cellulose-containing plants” as possible starting material for making a “broken-down alkali metal silicate polymer” for making resins and foams. A lignin preparation similar to the alkali lignin preparations used in Sarjeant is not even mentioned in Blount as a possible starting material. Thus, there would have been no suggestion in Brode, III et al. or Blount that a decayed lignocellulosic material is equivalent to an alkali lignin preparation in any type of composition, much less an adhesive composition as specifically claimed.

It is respectfully submitted that the application is in condition for allowance. Should there be any questions regarding this application, Examiner Nutter is invited to contact the undersigned attorney at the telephone number shown below.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By 
Wayne W. Rupert
Registration No. 34,420

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 595-5300
Facsimile: (503) 228-9446